



[4910-13-P]

**DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration**

**14 CFR Part 39**

**[Docket No. FAA-2014-0008; Directorate Identifier 2013-NM-076-AD]**

**RIN 2120-AA64**

**Airworthiness Directives; Embraer S.A. Airplanes**

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Notice of proposed rulemaking (NPRM).

**SUMMARY:** We propose to supersede Airworthiness Directive (AD) 2012-23-09, for all Embraer S.A. Model ERJ 190-100 STD, -100 LR, and -100 IGW airplanes; and Model ERJ 190-200 STD, -200 LR, and -200 IGW airplanes. AD 2012-23-09 currently requires revising the maintenance program to incorporate modifications in airworthiness limitations specified in Embraer S.A. ERJ 190 195 Maintenance Review Board Report (MRBR). Since we issued AD 2012-23-09, we have determined that more restrictive maintenance requirements and airworthiness limitations are necessary. This proposed AD would require revising the maintenance or inspection program to incorporate modifications in the airworthiness limitations specified in Embraer S.A. ERJ 190 195 MRBR to include new inspection tasks and their respective thresholds and intervals. We are proposing this AD to detect and correct fatigue cracking of structural components, which could result in reduced structural integrity of the airplane.

**DATES:** We must receive comments on this proposed AD by **[INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**.

**ADDRESSES:** You may send comments by any of the following methods:

- Federal eRulemaking Portal: Go to <http://www.regulations.gov>. Follow the instructions for submitting comments.

- Fax: (202) 493-2251.

- Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

- Hand Delivery: Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this proposed AD, contact Embraer S.A., Technical Publications Section (PC 060), Av. Brigadeiro Faria Lima, 2170 - Putim - 12227-901 São Jose dos Campos - SP – BRASIL; telephone +55 12 3927-5852 or +55 12 3309-0732; fax +55 12 3927-7546; email [distrib@embraer.com.br](mailto:distrib@embraer.com.br); Internet <http://www.flyembraer.com>. You may view this referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

### **Examining the AD Docket**

You may examine the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2014-0008; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this proposed AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Operations

office (telephone (800) 647-5527) is in the **ADDRESSES** section. Comments will be available in the AD docket shortly after receipt.

**FOR FURTHER INFORMATION CONTACT:** Kathrine Rask, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue SW., Renton, WA 98057-3356; telephone: (425) 227-2180; fax: (425) 227-1149.

**SUPPLEMENTARY INFORMATION:**

**Comments Invited**

We invite you to send any written relevant data, views, or arguments about this proposed AD. Send your comments to an address listed under the **ADDRESSES** section. Include “Docket No. FAA-2014-0008; Directorate Identifier 2013-NM-076-AD” at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this proposed AD. We will consider all comments received by the closing date and may amend this proposed AD based on those comments.

We will post all comments we receive, without change, to <http://www.regulations.gov>, including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this proposed AD.

## Discussion

On November 13, 2012, we issued AD 2012-23-09, Amendment 39-17265 (77 FR 73270, December 10, 2012). AD 2012-23-09 requires actions intended to address an unsafe condition on the products listed above.

Since we issued AD 2012-23-09, Amendment 39-17265 (77 FR 73270, December 10, 2012), the Agência Nacional de Aviação Civil (ANAC), which is the airworthiness authority for Brazil, has issued Brazilian Airworthiness Directive 2012-10-02, dated October 29, 2012 (referred to after this as the Mandatory Continuing Airworthiness Information, or “the MCAI”). We have determined that more restrictive maintenance requirements and airworthiness limitations are necessary. The MCAI states:

This [Brazilian] AD (<http://www2.anac.gov.br/certificacao/da/textos/1363amd.pdf>) results from a new revision to the Airworthiness Limitations Section (ALS) of Embraer ERJ 190 Maintenance Review Board Report (MRBR 1928), to include new or modification of the current tasks and its respective thresholds and intervals. Failure to inspect these structural components, according to the new or revised tasks, thresholds and intervals, could prevent a timely detection of fatigue cracking. These cracks, if not properly addressed, could adversely affect the structural integrity of the airplane.

You may examine the MCAI in the AD docket on the Internet at

<http://www.regulations.gov> by searching for and locating it in Docket No. FAA-2014-0008.

## **Relevant Service Information**

Embraer S.A. has issued Part 2 – Airworthiness Limitation Inspections (ALI) – Structures, of Appendix A, Airworthiness Limitation - (AL), of the EMBRAER 190 195 MRBR, MRB-1928, Revision 6, dated August 20, 2012; and Temporary Revision (TR) 6-3, dated November 30, 2012, to Part 2 – Airworthiness Limitation Inspections (ALI) – Structures, of Appendix A, Airworthiness Limitations - (AL), of the EMBRAER 190 195 MRBR, MRB-1928, Revision 6, dated August 20, 2012. The actions described in this service information are intended to correct the unsafe condition identified in the MCAI.

## **FAA’s Determination and Requirements of This Proposed AD**

This product has been approved by the aviation authority of another country, and is approved for operation in the United States. Pursuant to our bilateral agreement with the State of Design Authority, we have been notified of the unsafe condition described in the MCAI and service information referenced above. We are proposing this AD because we evaluated all pertinent information and determined an unsafe condition exists and is likely to exist or develop on other products of the same type design.

This AD requires revisions to certain operator maintenance documents to include new actions (e.g., inspections) and/or Critical Design Configuration Control Limitations (CDCCLs). Compliance with these actions and/or CDCCLs is required by 14 CFR 91.403(c). For airplanes that have been previously modified, altered, or repaired in the areas addressed by this AD, the operator may not be able to accomplish the actions described in the revisions. In this situation, to comply with 14 CFR 91.403(c), the

operator must request approval for an alternative method of compliance according to paragraph (k) of this AD. The request should include a description of changes to the required actions that will ensure the continued damage tolerance of the affected structure.

### **Costs of Compliance**

We estimate that this proposed AD affects 98 airplanes of U.S. registry.

The actions that are required by AD 2012-23-09, Amendment 39-17265 (77 FR 73270, December 10, 2012), and retained in this proposed AD take about 1 work-hour per product, at an average labor rate of \$85 per work-hour. Required parts cost about \$0 per product. Based on these figures, the estimated cost of the actions that were required by AD 2012-23-09 is \$85 per product.

We also estimate that it would take about 1 work-hour per product to comply with the basic requirements of this proposed AD. The average labor rate is \$85 per work-hour. Required parts would cost about \$0 per product. Based on these figures, we estimate the cost of this proposed AD on U.S. operators to be \$8,330, or 85 per product.

### **Authority for This Rulemaking**

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. "Subtitle VII: Aviation Programs," describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in "Subtitle VII, Part A, Subpart III, Section 44701: General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by

prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This proposed regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

### **Regulatory Findings**

We determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify this proposed regulation:

1. Is not a “significant regulatory action” under Executive Order 12866;
2. Is not a “significant rule” under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979);
3. Will not affect intrastate aviation in Alaska; and
4. Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

### **List of Subjects in 14 CFR Part 39**

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

### **The Proposed Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

## **PART 39 - AIRWORTHINESS DIRECTIVES**

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

### **§ 39.13 [Amended]**

2. The FAA amends § 39.13 by removing airworthiness directive AD 2012-23-09, Amendment 39-17265 (77 FR 73270, December 10, 2012):

**Embraer S.A:** Docket No. FAA-2014-0008; Directorate Identifier 2013-NM-076-AD.

#### **(a) Comments**

We must receive comments by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

#### **(b) Affected ADs**

This AD supersedes AD 2012-23-09, Amendment 39-17265 (77 FR 73270, December 10, 2012).

#### **(c) Applicability**

This AD applies to Embraer S.A. Model ERJ 190-100 STD, -100 LR, and -100 IGW airplanes; and Model ERJ 190-200 STD, -200 LR, and -200 IGW airplanes; certificated in any category; all serial numbers.

#### **(d) Subject**

Air Transport Association (ATA) of America Code 52, Doors; 53, Fuselage; 54, Nacelles/Pylons; 55, Stabilizers; 57, Wings; 71, Powerplant; and 78, Engine Exhaust.



**(e) Reason**

This AD was prompted by a determination that more restrictive maintenance requirements and airworthiness limitations are necessary. We are proposing this AD to detect and correct fatigue cracking of structural components, which could result in reduced structural integrity of the airplane.

**(f) Compliance**

Comply with this AD within the compliance times specified, unless already done.

**(g) Retained Revision of the Maintenance Program**

This paragraph restates the actions required by paragraph (h) of AD 2012-23-09, Amendment 39-17265 (77 FR 73270, December 10, 2012). Within 90 days after January 14, 2013 (the effective date of AD 2012-23-09), revise the maintenance program to incorporate the tasks specified in Part 2 – Airworthiness Limitation Inspections (ALI) – Structures, of Appendix A, Airworthiness Limitations (AL), of the EMBRAER 190 Maintenance Review Board Report, MRB-1928, Revision 5, dated November 11, 2010; and EMBRAER Temporary Revision (TR) 5-1, dated February 11, 2011, to Part 2 – Airworthiness Limitation Inspections (ALI) – Structures, of Appendix A, Airworthiness Limitations (AL), of the EMBRAER 190 Maintenance Review Board Report, MRB-1928, Revision 5, dated November 11, 2010; with the thresholds and intervals stated in these documents. The initial compliance times for the tasks are stated in the “Implementation Plan” section of Appendix A, Airworthiness Limitations (AL), of the EMBRAER 190 Maintenance Review Board Report, MRB-1928, Revision 5, dated November 11, 2010.

**(h) Retained No Alternative Actions or Intervals**

This paragraph restates the actions required by paragraph (i) of AD 2012-23-09, Amendment 39-17265 (77 FR 73270, December 10, 2012). After accomplishing the revision required by paragraph (g) of this AD, no alternative actions (e.g., inspections) or intervals, may be used, unless the actions or intervals are approved as an alternative method of compliance (AMOC) in accordance with the procedures specified in paragraph (k)(1) of this AD, and except as required by paragraph (i) of this AD.

**(i) New Requirements of this AD: Revision of the Maintenance or Inspection Program**

Within 60 days after the effective date of this AD, revise the maintenance or inspection program, as applicable, to incorporate the tasks specified in Part 2 – Airworthiness Limitation Inspections (ALI) – Structures, of Appendix A, Airworthiness Limitations - (AL), of the EMBRAER 190 195 Maintenance Review Board Report MRB-1928, Revision 6, dated August 20, 2012; and EMBRAER TR 6-3, dated November 30, 2012, to Part 2 – Airworthiness Limitation Inspections (ALI) – Structures, of Appendix A, Airworthiness Limitations - (AL), of the EMBRAER 190 195 Maintenance Review Board Report, MRB-1928, Revision 6, dated August 20, 2012; with the thresholds and intervals stated in these documents. The initial compliance times for the tasks are stated in the “Implementation Plan” section of Appendix A, Airworthiness Limitations - (AL), of the EMBRAER 190 195 Maintenance Review Board Report, MRB-1928, Revision 6, dated November 30, 2012, or within 90 days after the effective date of this AD, whichever occurs later. Doing the revision required by this paragraph terminates the revision required by paragraph (g) of this AD.

**(j) No Alternative Actions, Intervals, and/or Critical Design Configuration Control Limitations (CDCCLs)**

After accomplishment of the revision required by paragraph (i) of this AD, no alternative actions (e.g., inspections), intervals, and/or CDCCLs may be used unless the actions, intervals, and/or CDCCLs are approved as an AMOC in accordance with the procedures specified in paragraph (k)(1) of this AD.

**(k) Other FAA AD Provisions**

The following provisions also apply to this AD:

**(1) Alternative Methods of Compliance (AMOCs):** The Manager, International Branch, ANM-116, Transport Airplane Directorate, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the International Branch, send it to ATTN: Kathrine Rask, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue SW., Renton, WA 98057-3356; telephone: (425) 227-2180; fax: (425) 227-1149. Information may be emailed to: [9-ANM-116-AMOC-REQUESTS@faa.gov](mailto:9-ANM-116-AMOC-REQUESTS@faa.gov). Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office. The AMOC approval letter must specifically reference this AD.

**(2) Airworthy Product:** For any requirement in this AD to obtain corrective actions from a manufacturer, use these actions if they are FAA-approved. Corrective actions are considered FAA-approved if they were approved by the State of Design Authority (or its delegated agent, or the Design Approval Holder with a State of Design Authority's design organization approval, as applicable). For a repair method to be approved, the repair approval must specifically refer to this AD. You are required to ensure the product is airworthy before it is returned to service.

**(l) Related Information**

(1) Refer to Mandatory Continuing Airworthiness Information (MCAI) Brazilian Airworthiness Directive 2012-10-02, dated October 29, 2012, for related information. This MCAI may be found in the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2014-0008.

(2) For service information identified in this AD, contact Embraer S.A., Technical Publications Section (PC 060), Av. Brigadeiro Faria Lima, 2170 - Putim - 12227-901 São Jose dos Campos - SP – BRASIL; telephone +55 12 3927-5852 or +55 12 3309-0732; fax +55 12 3927-7546; email [distrib@embraer.com.br](mailto:distrib@embraer.com.br); Internet <http://www.flyembraer.com>. You may view this service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

Issued in Renton, Washington, on January 22, 2014.

Jeffrey E. Duvon,  
Manager,  
Transport Airplane Directorate,  
Aircraft Certification Service.

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